amoebiasis. The appearances on radiography vary and may show single or multiple calcified areas, but rarely so clean-cut and regular as in cases of hydatid disease.

Gummatous Calcification.—This is rare, and shows as irregular area of calcification in association with stigmata of the disease process elsewhere.

Hepatic Cysts.—These are very rare, and it is uncommon for them to be calcified so as to be visible on radiography. They may be single or multiple, but are much smaller than the previously discussed lesions.

Haemangiomata and Lymphangiomata.—These may be large or small, single or multiple. There is often evidence of similar lesions elsewhere in the body; and those of the liver, when calcified, show as circumscribed areas in which fronds of calcium appear to radiate from a central point like the spokes of a wheel.

Calcified Tuberculoma.—This also is rare, and there is usually evidence of the disease process elsewhere. Radiologically it is revealed as a spherical shadow, dense in the centre, with a translucent surrounding zone or moat. Such lesions are usually small. Tiny multiple foci of calcification may appear in rare cases of "healed" miliary tuberculosis.

Primary Neoplasms of Liver.—These may occasionally show as irregularly calcified areas.

Secondary Deposits.—Occasionally metastases may calcify, but evidence elsewhere of the primary lesion points to the diagnosis.

Hepatic Calculi.—These are extremely rare and very minute. They may be multiple or single.

Other Causes.—Hodgkin's disease, chronic renal disease, diabetes mellitus, eclampsia, and disease with bony destruction have all been reported as giving rise to intrahepatic calcification on occasion, although in each case the appropriate diagnosis can be reached by concurrent signs of the disease elsewhere.

The case described is felt to be one of amoebic origin in view of the past history of amboebiasis and in the absence of evidence of venereological disease, reticulosis, neoplasm, tuberculosis, or hydatid disease. The size, shape, and configuration of the area of calcification do not conform with the typical appearances of haemangioma, and there was no evidence of such lesions elsewhere. The fact that the lesion was so large and solitary virtually rules out hepatic cysts and calculi. The finding of a positive hydatid complement-fixation test, titre 1:4, is not felt to be relevant in this case in view of the low titre, negative Cassoni test, and absence of any other evidence of hydatid disease. The complement-fixation test is said to give 83% reliable positive results in hydatid disease in which the embryo is alive. The case here recorded showed an apparently completely inert lesion of the liver, and, although it is appreciated that hydatid disease cannot be completely ruled out, on balance of available evidence calcification of an amoebic abscess appears the more likely.

Summary

A case of intrahepatic calcification thought to be subsequent to amoebiasis is reported.

The differential diagnosis is discussed briefly.

I thank Colonel J. D. P. MacPherson, O.C., B.M.H., Hamburg, for permission to publish this case, and R.A.M. College, Millbank, London, for the result of the hydatid complement-fixation test.

BIBLIOGRAPHY

Aspray, M. (1945). *Amer. J. Roentgenol.*, **53**, 446.
Astley, R., and Harrison, N. (1949). *Brit. J. Radiol.*, **22**, 723.
Gray, E. F. (1944). *Amer. J. Roentgenol.*, **51**, 336.
Guz, A., and Lea, P. A. W. (1956). *British Medical Journal*, **1**, 385.
Hamburger, H. J. (1938). *Indian J. Pediat.*, **5**, 98.
Heilbrun, N., and Klein, A. J. (1946). *Amer. J. Roentgenol.*, **55**, 189.
Lingley, J. R. (1942). Ibid., **47**, 563.
Schlanger, P. M., and Schlanger, H. (1948). Ibid., **60**, 331.
Smallwood, W. C., Bishop, J. C., and Litchfield, J. A. (1955). *Lancet*, **2**, 377.
Walshe, J. M. (1954). *J. Path. Bact.*, **67**, 371.

THE DELAYED-ACTION STAB

BY

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The following cases are of interest if for no other reason than their medico-legal significance. The first two cases were seen in hospital practice, the third in private practice.

Case 1

It is customary for many Sydney housewives to leave on the doorstep the empty milk bottles and, beside them, payment for replacements. A youth in one of the northern suburbs was making quite a good thing out of this by doing rounds immediately prior to the milkman. One morning the milkman (aged 27) surprised him, and received for his intrusion a stab below the ninth left costochondral junction. He was admitted to a north-side hospital but was allowed to leave a few days later, when all, including chest *x*-ray film, was found to be normal.

One year later, on February 23, 1954, he was admitted to St. Vincent's Hospital under the care of Mr. Victor Kinsella. He complained of cramp-like epigastric pains of two days' duration. Upon admission the pain settled, but it recurred after 24 hours. *X*-ray examination of his chest revealed no abnormality. During the next week he had a number of similar attacks of pain.

An exploratory laparotomy was carried out on March 2. The greater curvature of the stomach, the splenic flexure, and a considerable quantity of omentum were found to have passed through a small opening in the diaphragm. They were adherent to the lung. After reduction of the viscera and closure of the diaphragmatic opening the patient made a good recovery.

Case 2

A native of Bogota aged 22 was involved in a fracas at a party in Surry Hills. He was stabbed in the left anterior axillary line between the eighth and ninth ribs. So far as could be ascertained the weapon was a pair of scissors. He was admitted to St. Vincent's Hospital on May 1, 1956. He complained of mild shoulder pain, but no significance was attached to this when it was found that his chest *x*-ray picture was normal. He was discharged on May 5.

Seven weeks later, on June 26, he presented at the casualty department complaining of pain in his left lower chest. His chest *x*-ray picture was again found to be normal and he was allowed to leave. He returned on June 29 complaining of vomiting and colicky pain in the left upper abdomen. A further chest *x*-ray film was taken. A number of small fluid levels could now be seen above the dome of the left diaphragm. A diagnosis of strangulated diaphragmatic hernia was made and left thoracotomy was performed at once.

Six inches (15 cm.) of transverse colon was found to have passed through an opening in the diaphragm ¾ in. (1.9 cm.) in diameter. They were adherent to lung and margins of diaphragmatic opening. The colon was reduced and the diaphragm repaired, following which the patient made a good recovery.

Case 3

Sheep crutching is largely carried out in the following manner. The sheep are herded into a yard, the operator arms himself with a pair of hand shears and takes up a position near the gate. With the shears held in the right hand he lunges at the back leg of the nearest animal, up-ends it, crutches it, and pushes it through the gate. He then successively repeats the manœuvre until all have been treated.

A man aged 41 was doing this when he slipped, the shears penetrating his left lower chest below the ninth rib in the

mid-axillary line. After overcoming his initial surprise he went along and had two stitches inserted in the wound. Nothing further eventuated.

Seven months later, whilst on holiday in Sydney, he developed pains in the left upper abdomen and left chest. They were not particularly severe and allowed of a barium examination, which revealed large bowel in the left thoracic cavity.

A left thoracotomy was carried out on October 26, 1955. Transverse colon was found in the chest. It was densely adherent to the lung and margins of the opening in the diaphragm. This opening was not greater than ¾ in. (1.9 cm.) in diameter. The abdominal contents were replaced and the diaphragm was repaired. The patient made a good recovery.

Comment

These three cases have certain features in common. (1) The injury was relatively mild. (2) It was situated in the left lower thoracic region. (3) The suspicion of injury to the diaphragm did not arise at the time of the initial incident. (4) The *x*-ray picture of the chest following the initial injury in Cases 1 and 2 was quite normal. No evidence of pneumothorax or lung damage was to be seen. The history in Case 3 suggests that had an *x*-ray film of the chest been taken this would likewise have been normal. (5) The latent period. In the three cases, one year, two months, and seven months respectively elapsed between the original injury and the onset of intestinal obstruction. It is assumed that negative intrathoracic pressure and positive intra-abdominal pressure were the factors responsible for the gradual ascent of the bowel. (6) All cases did well following surgery. However, it is easy to imagine such cases having a fatal termination. The opening is small, the amount of bowel that can ascend is large, and irreversible damage to the bowel is quite likely. (7) The medico-legal aspects, combining as they do a minor injury, a latent period, and then a strangulated diaphragmatic hernia, are of obvious importance. It is felt that in each of these cases the opening in the diaphragm was due to trauma. In no case was it felt that the opening was of congenital nature.

Summary

Three cases of strangulated diaphragmatic hernia are presented. In each case the strangulation followed a latent period consequent upon an apparently trivial stab wound in the left lower chest. It is suggested that the question of thoracotomy should receive consideration following similar injuries.

Medical Memoranda

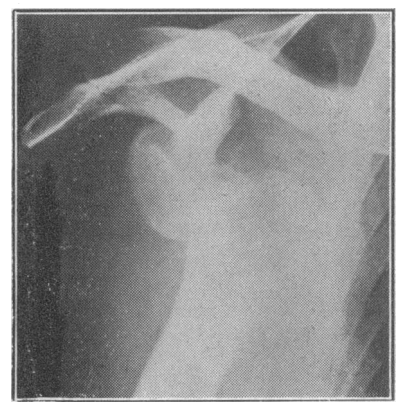
Posterior Dislocation of Shoulder-joint

This report is on a case of acute backward displacement of the head of the humerus, complicated by arterial and nerve involvement and followed by initial reduction to the subcoracoid position. From all other sources it appears that this type of injury is unusual. Sir Astley Cooper (1842) recorded retroglenoid dislocation following a convulsion, while Malgaigne in 1855 made mention of 34 cases dating from 1804, only three of these being from his own practice. More recent reports add emphasis to the rarity of the injury. Thomas (1937) saw 4 cases in 6,000 and reports 3 other cases with which he was associated. Wood (1941) gives 3 cases in 115 from the Massachusetts General Hospital between 1930 and 1938. Hindenach (1947) reports one case, and Taylor and Wright (1952) six. Mclaughlin (1952) finds a percentage of 3.8 amongst 581 dislocated shoulders, which corresponds with the 3 per 100 given by Févre and Mialaret (1938) from their series of cases.

Case Report

A general labourer aged 48 was seen in the casualty department following an accident to his right arm. He had caught a large oxygen cylinder in the crook of the arm, and the sudden impact had forced the arm backwards. He was in intense pain, being unable to move the affected limb.

On examination his right arm was fixed in external rotation with 20 degrees of abduction ; the shoulder sloped markedly downwards and was hollowed-out anteriorly. Palpation revealed an increased prominence of the acromion process, with a loss of the anterior prominence of the humeral head. Brachial, radial, and ulnar pulses were absent. Movement of the arm was completely lost, together with cutaneous sensation.



Radiograph in the antero-posterior axis, showing the appearance of the humeral head in posterior dislocation.

Radiographs showed that the head of the humerus was seated posteriorly to the glenoid fossa (see Fig.). No bony injury was evident.

Treatment was instituted immediately in order to restore the blood flow. Gentle traction was applied to the line of the abducted arm, some degree of adduction being given at the same time. A sudden internal rotation took place with a loud series of crepitations. It was then found that the humeral head had displaced forwards and was now in a subcoracoid position. There was relief from the agonizing pain immediately the posterior displacement had been rectified, while at the same time the blood supply was restored to the limb. The anterior dislocation was later reduced under general anaesthesia owing to the greatly increased degree of muscle spasm.

Subsequent treatment consisted in resting the shoulder by means of a sling for a period of three weeks. Hand and elbow exercises were started on the third day after the injury. When the three weeks had elapsed the patient was allowed to begin active shoulder movements with the proviso that he did nothing to produce pain in the affected shoulder and did not raise the arm above the line of the shoulder.

The follow-up proved uneventful. He began light work (painting and decorating) nine weeks after the accident, and by the twelfth week had progressed to heavier work, carrying out his normal duties using a pick and shovel. Seven months after the accident he had no complaints and stated that his shoulder gave no trouble whatsoever. On examination, movement was full, painless, and unrestricted. There were no crepitations, weakness, or disability. Whether the stability of the joint will be continued, and whether osteoarthritic changes will appear as the years go by, remain to be seen.

Comment

Taylor and Wright (1952) stated that the type of injury is generally the result of direct violence. This is confirmed from all sources. Hindenach (1947) reports the case of the injury done during physical training, while Mclaughlin (1952) gives a number of cases associated with epilepsy, shock treatment, and strenuous sports. Congenital and developmental anomalies do not appear to figure prominently in the aetiology of the injury.

The prognosis is good except where the condition has remained untreated for any length of time. Of the 22 cases reported by Mclaughlin, 6 first injuries which were diagnosed